Check Point 12000 Appliances

Getting Started Guide

softwareblades™

31 October 2011

Check Point
SOFTWARE TECHNOLOGIES LTD.
We Secure the Internet.

Models: P-210, P-220, and P-230

Important Information

Latest Software

We recommend that you install the most recent software release to stay up-to-date with the latest functional improvements, stability fixes, security enhancements and protection against new and evolving attacks.

Latest Documentation

The latest version of this document is at:
http://supportcontent.checkpoint.com/documentation_download?ID=12687

For additional technical information, visit the Check Point Support Center (http://supportcenter.checkpoint.com).

Revision History

Date	Description
31 October 2011	Updated Flow Control settings in Connecting to the CLI (on page 22) and Restoring Using the Console Boot Menu
15 August 2011	First release of this document

Feedback

Check Point is engaged in a continuous effort to improve its documentation.

Please help us by sending your comments (mailto:cp_techpub_feedback@checkpoint.com?subject=Feedback on Check Point 12000 Appliances Getting Started Guide).

Safety, Environmental, and Electronic Emissions Notices

Read the following warnings before setting up or using the appliance.

Warning - Do not block air vents. A minimum 1/2-inch clearance is required.

Warning - This appliance does not contain any user-serviceable parts. Do not remove any covers or attempt to gain access to the inside of the product. Opening the device or modifying it in any way has the risk of personal injury and will void your warranty. The following instructions are for trained service personnel only.

To prevent damage to any system board, it is important to handle it with care. The following measures are generally sufficient to protect your equipment from static electricity discharge:

- When handling the board, to use a grounded wrist strap designed for static discharge elimination.

- Touch a grounded metal object before removing the board from the antistatic bag.

- Handle the board by its edges only. Do not touch its components, peripheral chips, memory modules or gold contacts.

- When handling processor chips or memory modules, avoid touching their pins or gold edge fingers.

- Restore the communications appliance system board and peripherals back into the antistatic bag when they are not in use or not installed in the chassis. Some circuitry on the system board can continue operating even though the power is switched off.

- Under no circumstances should the lithium battery cell used to power the real-time clock be allowed to short. The battery cell may heat up under these conditions and present a burn hazard.

    Warning - DANGER OF EXPLOSION IF BATTERY IS INCORRECTLY REPLACED. REPLACE ONLY WITH SAME OR EQUIVALENT TYPE RECOMMENDED BY THE MANUFACTURER. DISCARD USED BATTERIES ACCORDING TO THE MANUFACTURER'S INSTRUCTIONS.

- Disconnect the system board power supply from its power source before you connect or disconnect cables or install or remove any system board components. Failure to do this can result in personnel injury or equipment damage.

- Avoid short-circuiting the lithium battery; this can cause it to superheat and cause burns if touched.

- Do not operate the processor without a thermal solution. Damage to the processor can occur in seconds.

- Class 1 Laser Product Warning

Rack Mount Instructions

The following or similar rack-mount instructions are included with the installation instructions:

1. Elevated Operating Ambient - If installed in a closed or multi-unit rack assembly, the operating ambient temperature of the rack environment may be greater than room ambient. Therefore, consideration should be given to installing the equipment in an environment compatible with the maximum ambient temperature specified by the manufacturer.
2. Reduced Air Flow - Installation of the equipment in a rack should be such that the amount of air flow required for safe operation of the equipment is not compromised.
3. Mechanical Loading - Mounting of the equipment in the rack should be such that a hazardous condition is not achieved due to uneven mechanical loading.

4. Circuit Overloading - Consideration should be given to the connection of the equipment to the supply circuit and the effect that overloading of the circuits might have on over current protection and supply wiring. Appropriate consideration of equipment nameplate ratings should be used when addressing this concern.

5. Reliable Earthing - Reliable earthing of rack-mounted equipment should be maintained. Particular attention should be given to supply connections other than direct connections to the branch circuit (e.g. use of power strips).

For California:

Perchlorate Material - special handling may apply. See http://www.dtsc.ca.gov/hazardouswaste/perchlorate

The foregoing notice is provided in accordance with California Code of Regulations Title 22, Division 4.5, Chapter 33. Best Management Practices for Perchlorate Materials. This product, part, or both may include a lithium manganese dioxide battery which contains a perchlorate substance.

Proposition 65 Chemical

Chemicals identified by the State of California, pursuant to the requirements of the California Safe Drinking Water and Toxic Enforcement Act of 1986, California Health & Safety Code s. 25249.5, et seq. ("Proposition 65"), that is "known to the State to cause cancer or reproductive toxicity" (see http://www.calepa.ca.gov)

WARNING:

Handling the cord on this product will expose you to lead, a chemical known to the State of California to cause cancer, and birth defects or other reproductive harm. Wash hands after handling.

Federal Communications Commission (FCC) Statement:

For a Class A digital device or peripheral

Note: This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense.

For a Class B digital device or peripheral

NOTE: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.

- Increase the separation between the equipment and receiver.

- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.

- Consult the dealer or an experienced radio/TV technician for help.

Information to user:

The user's manual or instruction manual for an intentional or unintentional radiator shall caution the user that changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment. In cases where the manual is provided only in a form other than paper, such as on a computer disk or over the Internet, the information required by this section may be included in the manual in that alternative form, provided the user can reasonably be expected to have the capability to access information in that form.

Canadian Department Compliance Statement:

This Class A digital apparatus complies with Canadian ICES-003. Cet appareil numérique de la classe A est conforme à la norme NMB-003 du Canada.

This Class B digital apparatus complies with Canadian ICES-003. Cet appareil numérique de la classe B est conforme à la norme NMB-003 du Canada.

Japan Compliance Statement:

Class A

この装置は，クラスA情報技術装置です。この装置を家庭環境で使用すると電波妨害を引き起こすことがあります。この場合には使用者が適切な対策を講ずるよう要求されることがあります。　　　　VCCI－A

Class B

この装置は，クラスB情報技術装置です。この装置は，家庭環境で使用することを目的としていますが，この装置がラジオやテレビジョン受信機に近接して使用されると，受信障害を引き起こすことがあります。
取扱説明書に従って正しい取り扱いをして下さい。　　　　VCCI－B

European Union (EU) Electromagnetic Compatibility Directive

This product is herewith confirmed to comply with the requirements set out in the Council Directive on the Approximation of the Laws of the Member States relating to Electromagnetic Compatibility Directive (2004/108/EC). For the evaluation regarding the Electromagnetic Compatibility (2004/108/EC)

This product is in conformity with Low Voltage Directive 2006/95/EC, and complies with the requirements in the Council Directive 2006/95/EC relating to electrical equipment designed for use within certain voltage limits and the Amendment Directive 93/68/EEC.

Product Disposal

This symbol on the product or on its packaging indicates that this product must not be disposed of with your other household waste. Instead, it is your responsibility to dispose of your waste equipment by handing it over to a designated collection point for the recycling of waste electrical and electronic equipment. The separate collection and recycling of your waste equipment at the time of disposal will help to conserve natural resources and ensure that it is recycled in a manner that protects human health and the environment. For more information about where you can drop off your waste equipment for recycling, please contact your local city office or your household waste disposal service.

Contents

Chapter 1

Introduction

In This Chapter

Welcome

Thank you for choosing Check Point 12000 Appliances. We hope that you will be satisfied with this system and our support services. Check Point products provide your business with the most up to date and secure solutions available today.

Check Point also delivers worldwide technical services including educational, professional and support services through a network of Authorized Training Centers, Certified Support Partners and Check Point technical support personnel to ensure that you get the most out of your security investment.

For additional information on the Internet Security Product Suite and other security solutions, refer to the Check Point Web site (http://www.checkpoint.com). For additional technical information about Check Point products, consult the Check Point Support Center (http://supportcenter.checkpoint.com).

Welcome to the Check Point family. We look forward to meeting all of your current and future network, application and management security needs.

Check Point 12000 Appliances Overview

The family of Check Point 12000 Appliances enables organizations to maximize security in high-performance environments such as large campuses or data centers. Combining integrated firewall, IPSec VPN, and intrusion prevention with advanced acceleration technologies, Check Point 12000 Appliances deliver a high-performance security platform capable of blocking application layer threats. Even as new threats appear, Check Point 12000 Appliances maintain or increase performance while protecting the network against attacks.

Key Features:

- Proven, enterprise-class firewall, VPN, and intrusion prevention

- Accelerated security performance, including SecureXL and CoreXL technologies

- Integrated load balancing and dynamic routing for data center reliability levels

- Centrally managed from Security Management Server/Check Point 12000 Appliances or as a stand alone device

- Automatic security protection updates from Check Point

This document provides:

- A brief overview of essential Check Point 12000 Appliances concepts and features

- A step by step guide to getting Check Point 12000 Appliances up and running

Note - Screenshots in this guide may apply only to the highest model to which this guide applies.

Shipping Carton Contents

This section describes the contents of the shipping carton.

Item	Description
Appliance	Check Point 12000 appliance
Rack Mounting Accessories	Hardware mounting kit
Cables	• Power cable (12200 appliance) • 2 Power cables (12400 and 12600 appliances) • 1 Standard RJ-45 network cable • 1 Serial console cable
Documentation	• Quick Start Guide • Getting Started Guide • Image Management Guide • User license agreement

Terminology

The following terms are used in this guide:

- **Gateway**: The security engine that enforces the organization's security policy and acts as a security enforcement point.

- **Security Policy**: The policy created by the system administrator that regulates the flow of incoming and outgoing communication.

- **Security Management Server**: The server used by the system administrator to manage the security policy. The organization's databases and security policies are stored on the Security Management Server and downloaded to the gateway.

- **SmartConsole**: GUI applications that are used to manage various aspects of security policy enforcement. For example, SmartView Tracker is a SmartConsole application that manages logs.

- **SmartDashboard**: A SmartConsole GUI application that is used by the system administrator to create and manage the security policy.

- **Locally Managed Deployment**: The appliance is a Security Gateway and a Security Management server. The Security Management server manages the Security Policy that is enforced by the Security Gateway.

- **Centrally Managed Deployment**: The appliance is a Security Gateway, without a Security Management server. The Security Gateway is managed by a remote Security Management server.

Chapter 2

Rack Mounting

This chapter describes how to mount the appliance in a rack.

⚠ **Important** - Two people are required to install the appliance in a rack in order to prevent any possible damage.

In This Chapter

Rack Mounting Hardware and Tools

You must install rack mounting hardware on the appliance before you can mount it in a rack. This table describes the rack mounting hardware.

📝 **Note** - Screws to attach the ear mount brackets and rail plates to the rack are not included.

| Hardware Description	Qty.	Use
Ear mount bracket	2	Attaches to the appliance front panel. Both ear mount brackets are identical.
Ear mount screws	6	Secures the ear mount brackets to the appliance front panel.
Appliance rail	2	Attaches to the appliance. Both rails are identical.
Rail plates	2	Attaches to the appliance rails. Both plates are identical.
Appliance rail screws	14	Secures the rail plates to the appliance rails and the rails to the appliance.

Rack Mounting Tools

Philips screwdriver. A magnetic head is recommended to hold screws in place and retrieve dropped screws. A powered screwdriver is also useful.

Rack Mounting Check Point 12200

Attaching the Ear Mount Brackets to the Appliance

Attach the two ear mount brackets to the front of the appliance.
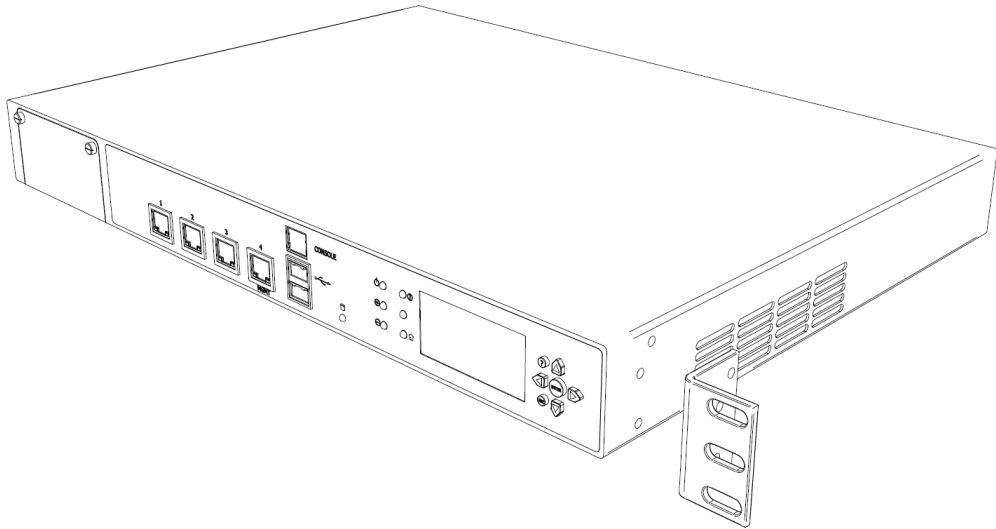
> **Note** - The ear mount screws have 5 mm heads.

To attach the ear mount brackets to the appliance:

1. Attach the appliance ear bracket to one side of the appliance using three ear mount screws.
2. Do step 1 again for the other side of the appliance.

Attaching the Rail Plates

Attach the rail plates to the appliance rails to connect the appliance to the rear vertical rails of the rack.
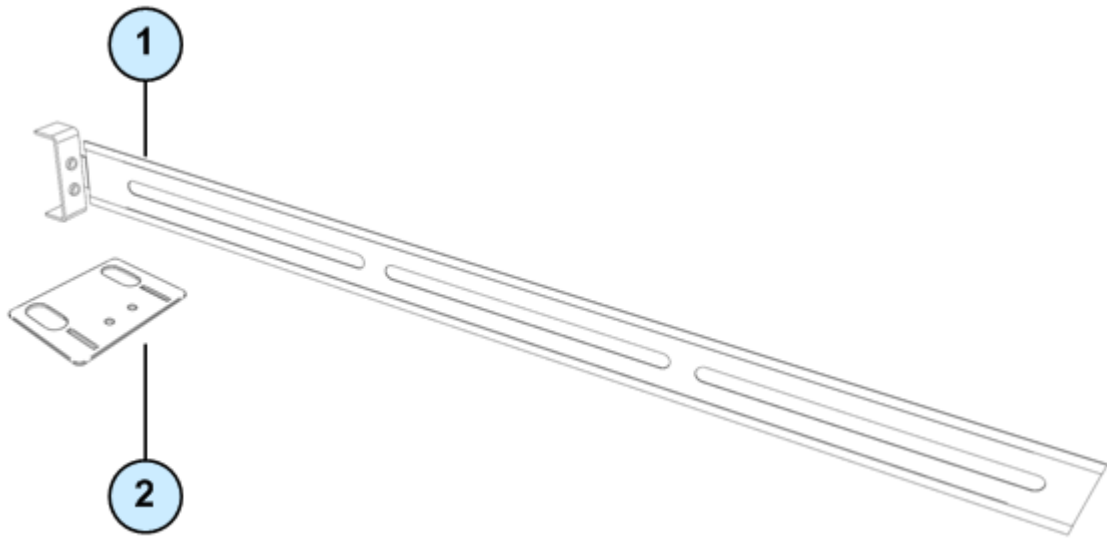
Item	Description
1	Appliance rail
2	Rail plate

> **Note** - The appliance rail screws have 8 mm heads.

To attach the rail plates:

1. Attach a rail plate to an appliance rail using two appliance rail screws.
2. Do step 1 again for the other rail plate and appliance rail.
   This figure shows the assembled rail plate and appliance rail.

Attaching the Appliance Rails to the Appliance

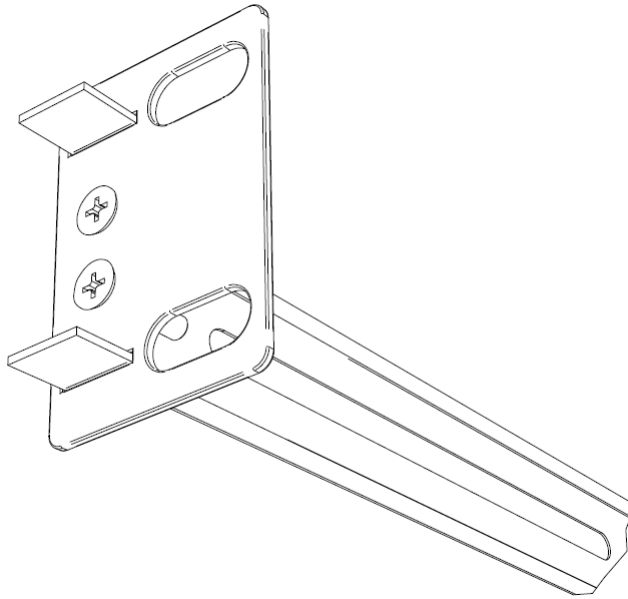Attach the appliance rails to the sides of the appliance. Position the rail plates to connect the appliance rails to the rear of the rack.

Note - The appliance rail screws have 8 mm heads.

To attach the appliance rails:

1. Set the appliance rail on the side of the appliance. The ridges on the appliance rails point to the appliance. This diagram shows the appliance rail and rail plate positioned correctly:
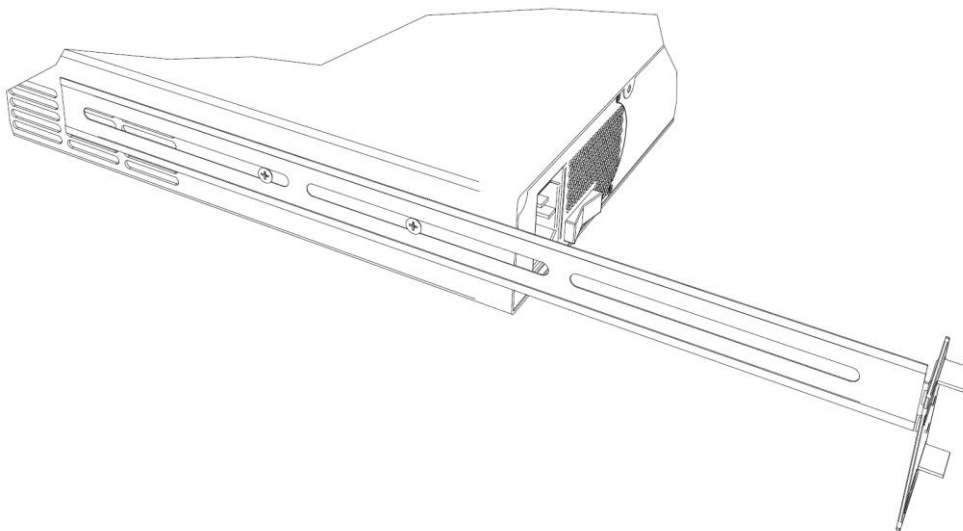
2. Attach the appliance rails to the appliance using three appliance rail screws.
3. Do steps 1 and two again for the other side of the appliance.

Installing the Appliance in the Rack

Install the appliance in the rack. It may be necessary to adjust the appliance rails to secure the appliance to the rack.
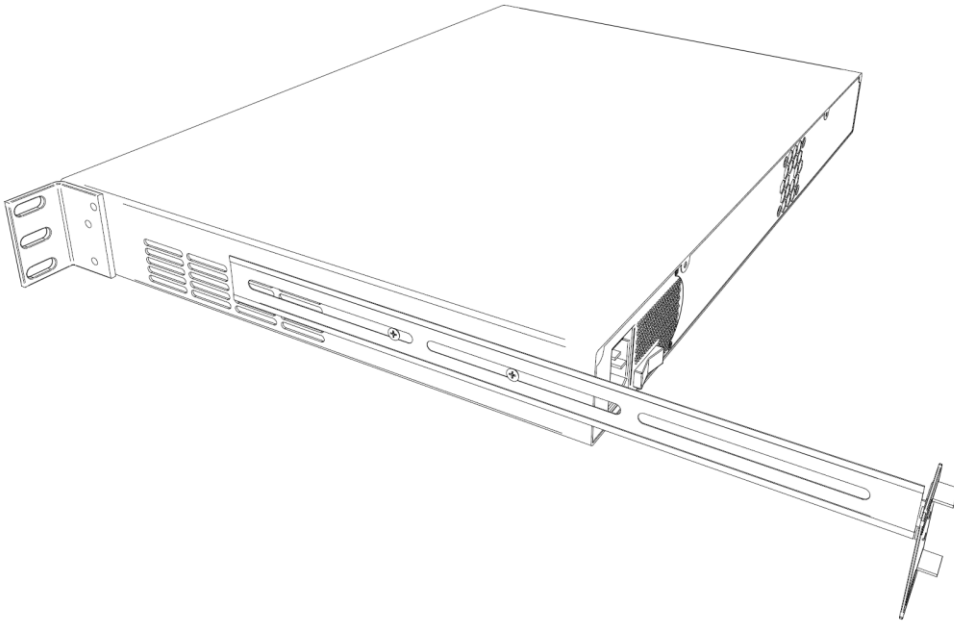
⚠️ **Important** - Two people are required to install the appliance in a rack in order to prevent personal injury or damage to the appliance.

To install the appliance in the rack:

1. Attach the ear mount brackets to the front of the rack.
2. Attach the rail plates to the rear of the rack.
3. Confirm that the appliance is stable and secure in the rack.

Rack Mounting Check Point 12400 and 12600

Attaching the Ear Mount Brackets to the Appliance

Attach the two ear mount brackets to the front of the appliance.
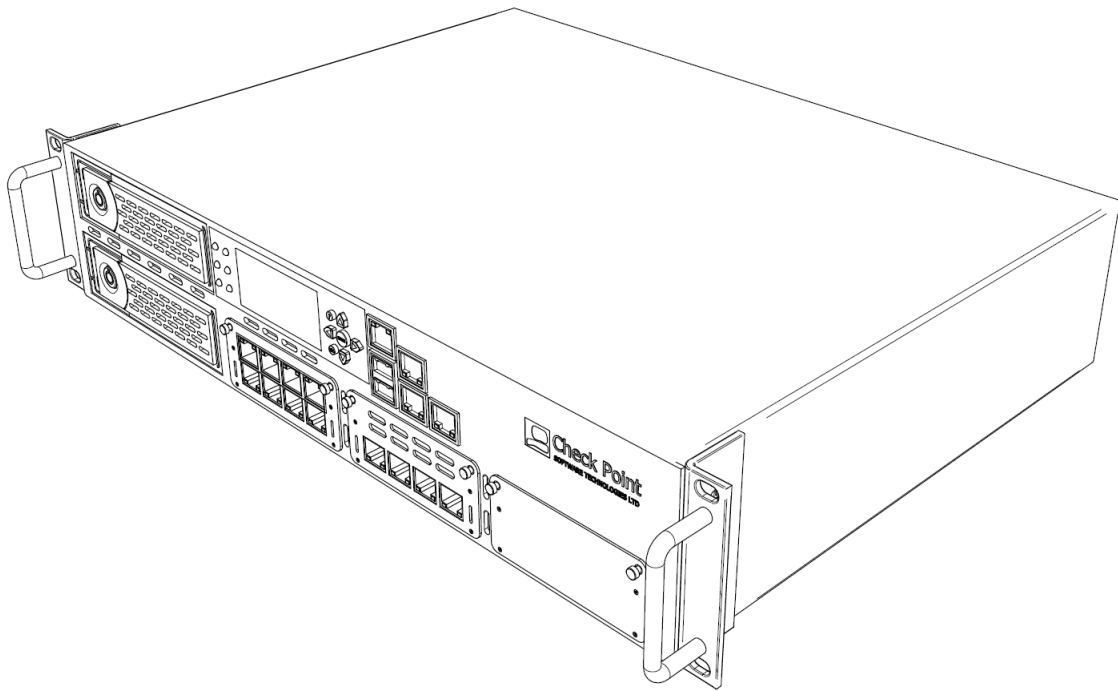
To attach the ear mount brackets to the appliance:

1. Attach the appliance ear bracket to one side of the appliance using three ear mount screws.
2. Do step 1 again for the other side of the appliance.

Attaching the Rail Plates

Attach the rail plates to the appliance rails to attach the appliance to the rear vertical rails of the rack.
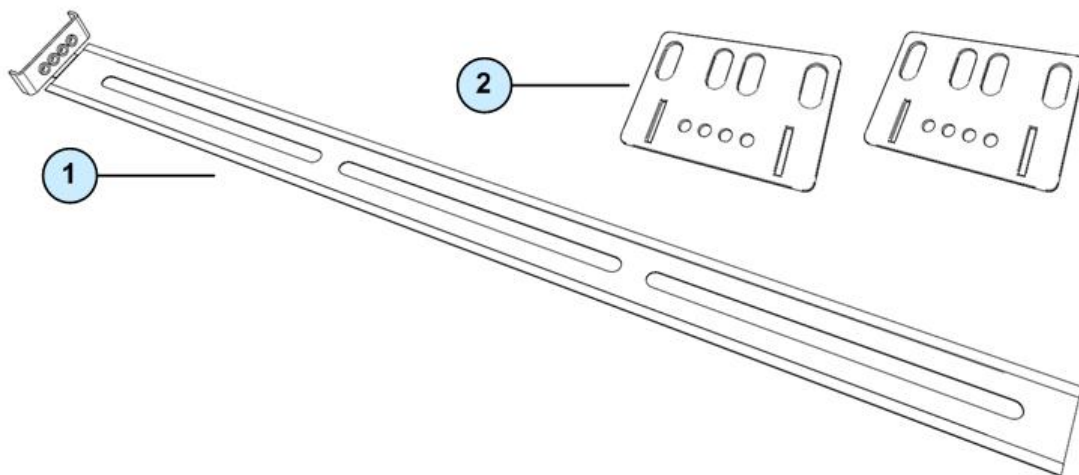
Item	Description
1	Appliance rail
2	Rail plates

To attach the rail plates:

1. Attach a rail plate to an appliance rail using four appliance rail screws.
2. Do step 1 again for the other rail plate and appliance rail.

This figure shows the assembled rail plate and appliance rail.
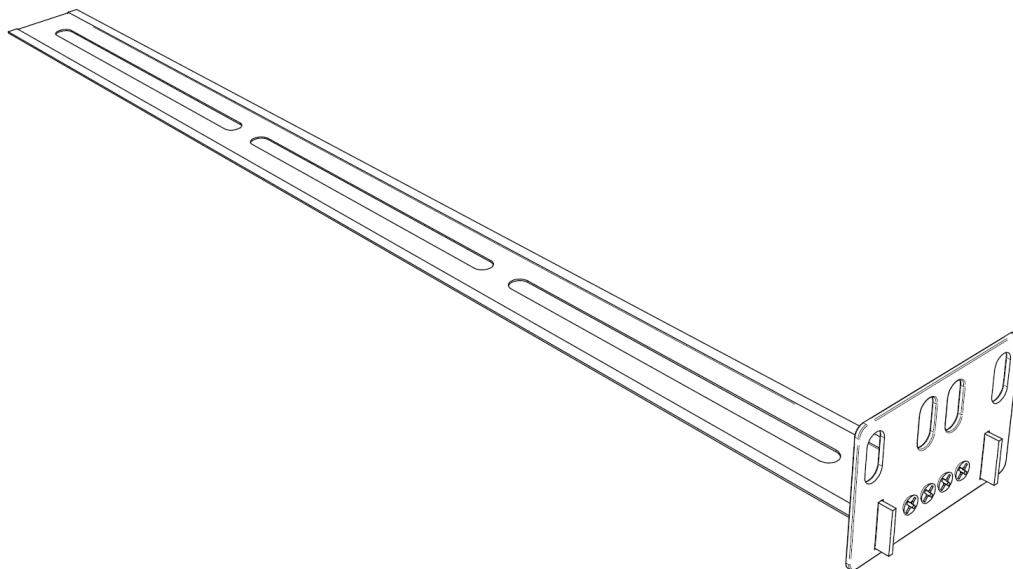
Attaching the Appliance Rails to the Appliance

Attach the appliance rails to the sides of the appliance. The rail plates are positioned to connect the appliance rails to the rear of the rack.

To attach the appliance rails:

1. Set the appliance rail on the side of the appliance. The ridges on the appliance rails point to the appliance. This diagram shows the appliance rail and rail plate positioned correctly:
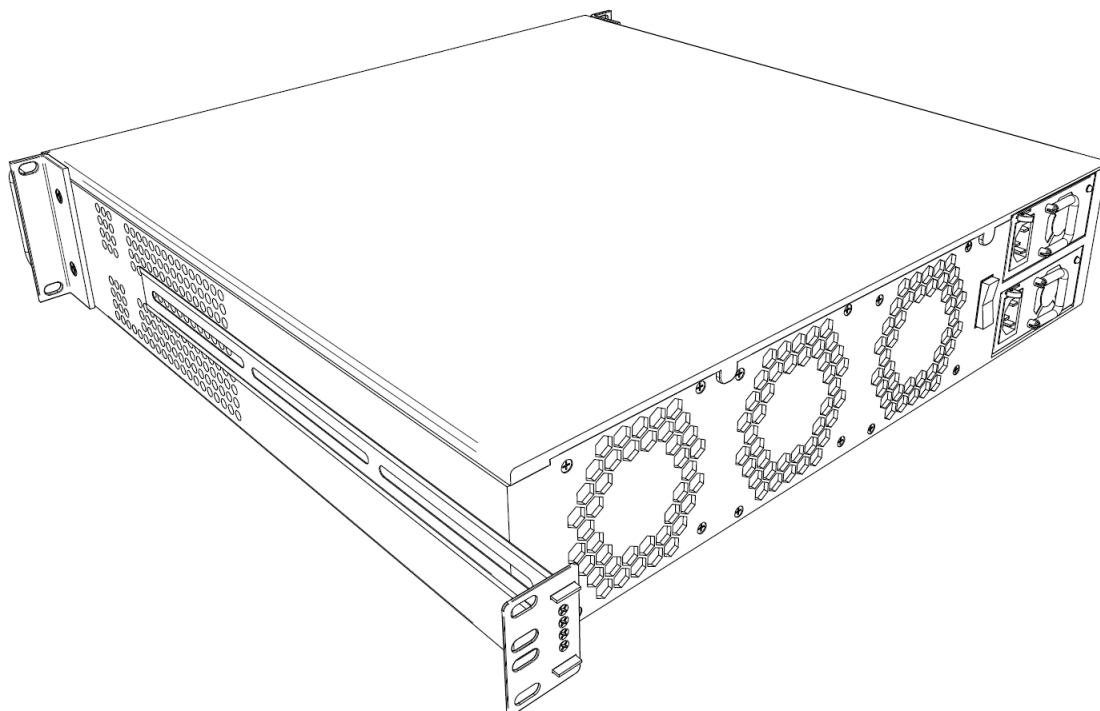
2. Attach the appliance rails to the appliance using three appliance rail screws.
3. Do steps 1 and 2 again for the other side of the appliance.

Installing the Appliance in the Rack

Install the appliance in the rack. It may be necessary to adjust the appliance rails to secure the appliance to the rack.

⚠ **Important** - Two people are required to install the appliance in a rack in order to prevent personal injury or damage to the appliance.

To install the appliance in the rack:

1. Attach the ear mount brackets to the front of the rack.
2. Attach the rail plates to the rear of the rack.
3. Confirm that the appliance is stable and secure in the rack.

Chapter 3

Configuring Check Point 12000 Appliances

The workflow for configuring Check Point 12000 Appliances is:

1. Connect the cables and power on the appliance.
2. Use the First Time Configuration Wizard to configure the appliance.
3. Add the Check Point 12000 Appliances object in SmartDashboard and install a policy.

Powering On

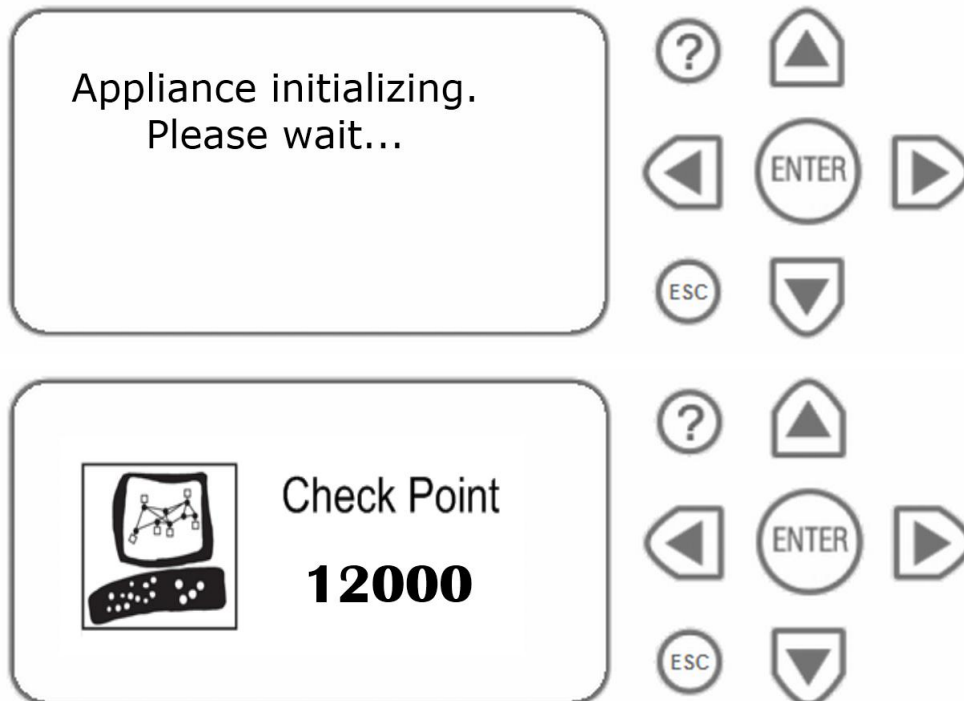**To power on Check Point 12000 Appliances:**

1. Connect the power cable.
2. On the back panel, turn on the **Power** button to start the appliance.

> **Note** -When a power supply fails or is not connected to the outlet, an alarm sounds continuously. If you hear the alarm, replace the faulty power supply immediately, and connect the new unit to an A/C outlet ("Replacing Power Supplies" on page 29).

3. Wait for the appliance to initialize and boot. The status of the appliance appears on the LCD screen:

The appliance is ready to use when the model number is displayed.

Using the First Time Configuration Wizard

Perform the initial configuration of Check Point 12000 Appliances using the First Time Configuration Wizard.

You can use the following commands at any time:

- Click **Quit** to exit.

- Click **Next** to move to the next page of the wizard.

> **Note** - When running the First Time Configuration Wizard, you may not see all the windows that are described in this guide. The windows that appear in the wizard depend on the Check Point 12000 Appliances software image and the selections that you make.

Starting the First Time Configuration Wizard

To start the First Time Configuration Wizard:

1. Connect a standard network cable to the appliance's management interface and to your management network.

   The management interface is marked **MGMT**. This interface is preconfigured with the IP address 192.168.1.1.

2. Connect to the management interface, from a computer on the same network subnet as the management interface.

   For example: IP address 192.168.1.x and net mask 255.255.255.0. This can be changed in the WebUI.

3. To access the management interface, open a connection from a browser to the default management IP address: https://192.168.1.1:4434.

   > **Note** - Pop-ups must always be allowed on
   > `https://<appliance_ip_address>`.

4. The login page opens. Log in to the system using the default login name/password: **admin/admin** and click **Login**.

> **Note** - The features configured in the wizard are accessible after completing the wizard via the WebUI menu. The WebUI menu can be accessed by navigating to `https://<appliance_ip_address>:4434`.

5. Change the administrator password, as prompted. The default password gives you access to the appliance. For security purposes, you must change it to a more secure password.

   In the Password recovery login token section, you can download a Login Token that you can use if you forget the password. We highly recommended to save and safely store the password recovery login token file.

6. The **First Time Configuration Wizard** runs.

The First Time Configuration Wizard presents windows that help you to configure the appliance.

Welcome

The **Welcome** page summarizes the steps of the First Time Configuration Wizard.

Appliance Date and Time Setup

Configure date and time in the **Date and Time Setup** page. Click **Apply**.

Network Connections

Configure the network connections in the **Network Connections** page.
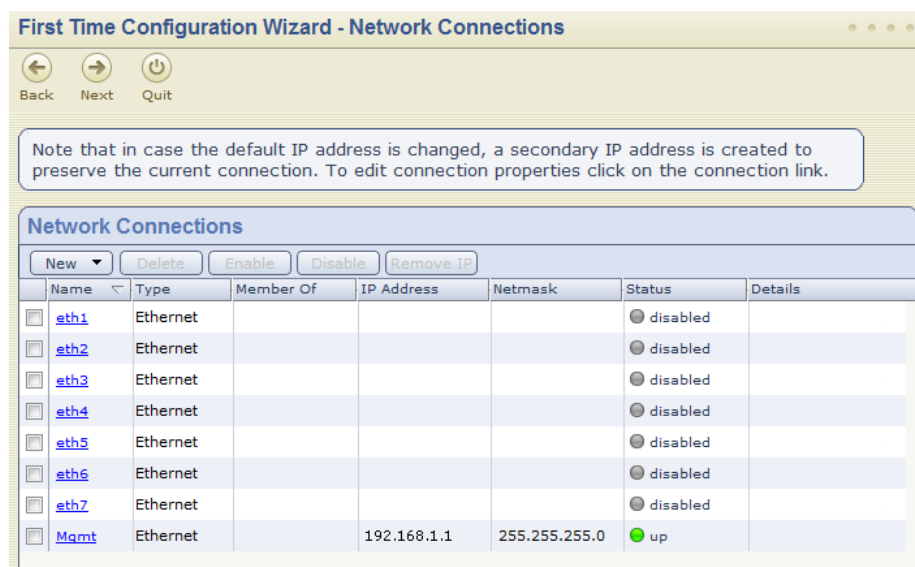
You can modify the Management IP address and connectivity is preserved. A secondary interface is created automatically to preserve connectivity. This interface can be removed after the wizard is completed in the **Network > Network Connections** page after the wizard is completed.

Routing Table

Configure the routing settings on the **Routing Table** page.

Host, Domain Settings, and DNS Servers

Set the Host, Domain and DNS Servers in the **Host, Domain Settings, and DNS Servers** page.

The host name must start with a letter and cannot be named com1, com2....com9.

In the DNS section, set the DNS servers for the appliance.

Management Type

Set how the appliance is managed in the **Management Type** page.

- **Locally Managed Deployment**: The appliance is a Security Gateway and a Security Management server. The Security Management server manages the Security Policy that is enforced by the Security Gateway.

- **Centrally Managed Deployment**: The appliance is a Security Gateway, without a Security Management server. The Security Gateway is managed by a remote Security Management server.

Locally Managed Deployment

This section describes how to configure the appliance for locally managed deployment.

Check Point 12000 Appliances Cluster

Configure the cluster type. If you select **This appliance is part of a Check Point 12000 Appliances Cluster**, the options are:

- **Primary cluster member**

- **Secondary cluster member**

For information about clusters, see the *ClusterXL Administration Guide* (http://supportcenter.checkpoint.com) for your Check Point version*.*

Web/SSH and GUI Clients Configuration

Define the clients that are allowed to connect to the appliance using a web browser or SSH client. These clients can manage the appliance using a web or SSH connection.

You can define a **Host** according to **Hostname** or **IP address**. Enter a comma-separated list of IP addresses from which you manage the appliance. Enter `Any` to manage the appliance from anywhere.

Note - Do not use the `Any` value for security reasons.

After you complete the First Time Configuration Wizard, more options are available using the **WebUI** menu.

Download SmartConsole Applications

Configuring a security policy requires you to install the SmartConsole applications. In the **Download SmartConsole Applications** window, you can download SmartConsole and install it on Windows machines.

The release notes of your Check Point version in the Check Point Support Center (http://supportcenter.checkpoint.com), lists compatible Windows operating systems for SmartConsole.

Centrally Managed Deployment

This section describes how to configure the appliance for centrally managed deployment.

Gateway Type

Configure the gateway type for a *Centrally Managed* appliance. Choose one of:

- **Standard Gateway**

- **This Gateway is a member of a cluster**

- **This Gateway uses a dynamically assigned IP**

Web/SSH and GUI Clients Configuration

Define the clients that are allowed to connect to the appliance using a web browser or SSH client. These clients can manage the appliance using a web or SSH connection.

You can define a **Host** according to **Hostname** or **IP address**. Enter a comma-separated list of IP addresses from which you manage the appliance. Enter `Any` to manage the appliance from anywhere.

> **Note** - Do not use the `Any` value for security reasons.

After you complete the First Time Configuration Wizard, more options are available using the **WebUI** menu.

SIC Setup

Configure the SIC (Secure Internal Communication) settings for a **Centrally Managed** appliance. Enter a **SIC Activation Key**. The same key is used by the gateway object in SmartDashboard.

Summary

The **Summary** page opens.

Click **Finish** to complete the First-Time Configuration Wizard. You can login to the appliance after several minutes.

> **Note** - You should backup the system configuration. The Backup and Restore window can be accessed via the WebUI interface, **Appliance > Backup and Restore**.

Creating the Network Object

Configure the Check Point 12000 Appliances as a gateway object in the Security Management Server database.

To create the network object in SmartDashboard:

1. Launch SmartDashboard.
2. Configure a new gateway object for the appliance.
3. Enter the IP address for the appliance.
4. For a centrally managed installation, establish Secure Internal Communication (SIC) using the activation key entered in the First Time Configuration Wizard.
5. Configure the topology.
6. Install the security policy.

Advanced Configuration

Advanced configuration can be done using the `sysconfig` menu which can be accessed using the command line interface only. For example, configuring the appliance to be a DHCP server.

> **Note** - The `sysconfig` menu is only available after running the **First Time Configuration Wizard** in the WebUI.

CLI access can be obtained by console connection or through SSH.

Connecting to the CLI

You can connect to the command line interface of Check Point 12000 Appliances using:

- The provided serial console cable (DTE to DTE) and terminal emulation software such as HyperTerminal and PuTTY (from Windows), or Minicom (from Unix/Linux systems).
  - Connection parameters for the appliance are: 9600bps, no parity, 1 stop bit (8N1).
  - Set the **Flow Control** to **None**.
- An SSH connection to the management interface (if SSHD is configured).

Chapter 4

Check Point 12000 Appliances Hardware

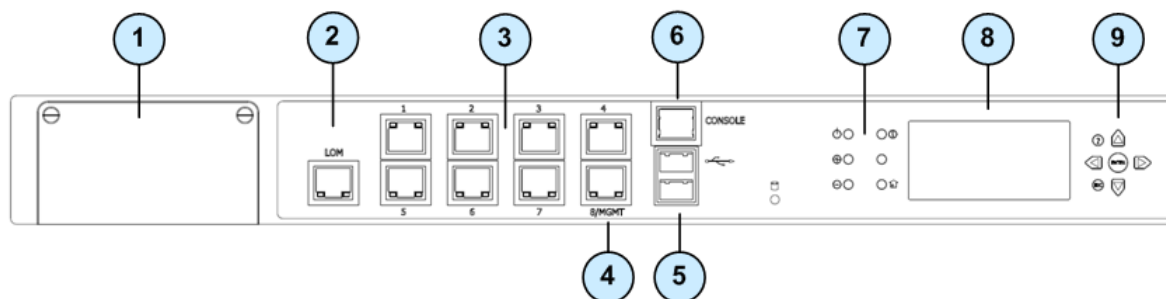This chapter provides instructions for installing and removing hardware components on Check Point 12000 Appliances.

In This Chapter

Front Panel Components

The section describes the hardware on the front panel of the appliance.

Check Point 12200 Front Panel

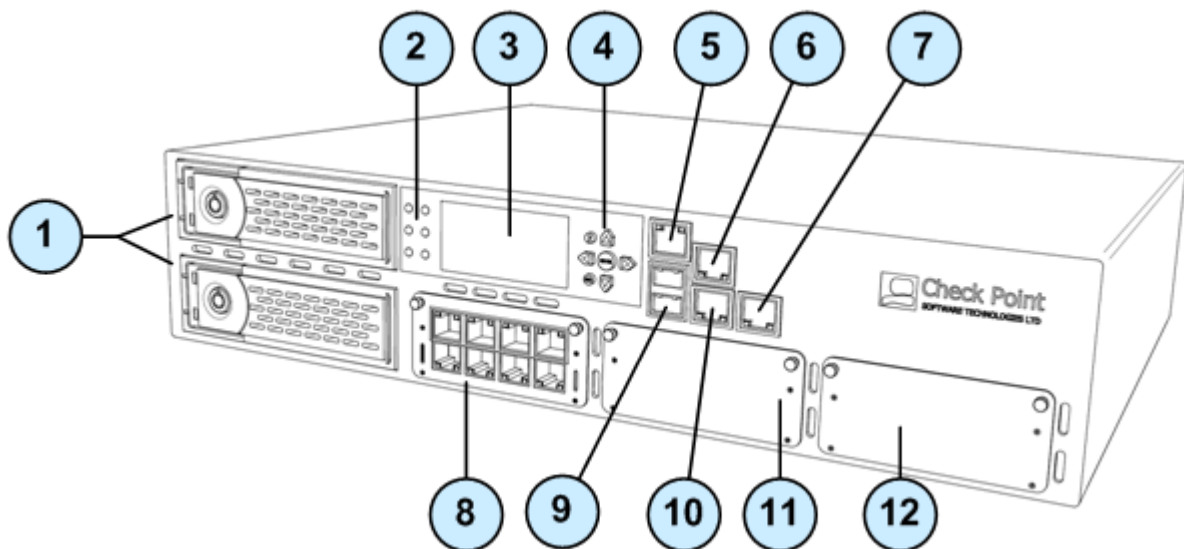| Item	Component	Description
1	Expansion line card	Expansion slot
2	LOM Port	LOM (Light Out Management) port for the optional LOM card
3	Built in Ethernet ports	ETH1 - ETH7
4	Management configuration port	Ethernet connection to a remote management workstation
5	USB ports	
6	Console port	A serial connection to the appliance using a terminal emulation program such as HyperTerminal or PuTTY
7	System LEDs	System power, system status, and hard disk activity
8	LCD display screen	

Item	Component	Description
9	Keypad	Perform basic management operations ("Using the LCD Panel" on page 28)

Expansion Line Card Options

Expansion line cards can have two, four, or eight ports. These types of expansion line cards are available:

Model	Description
CPAC-2-10F	2 Port 10GBase-F SFP+ (without transceivers)
CPAC-4-1C	4 Port 10/100/1000Base-T RJ-45
CPAC-4-1F	4 Port 1000Base-F SFP (without transceivers)
CPAC-4-10F	4 Port 10GBase-F Ethernet PCI-e SFP+
CPAC-8-1C	8 Port 10/100/1000Base-T RJ-45

Check Point 12400 Front Panel

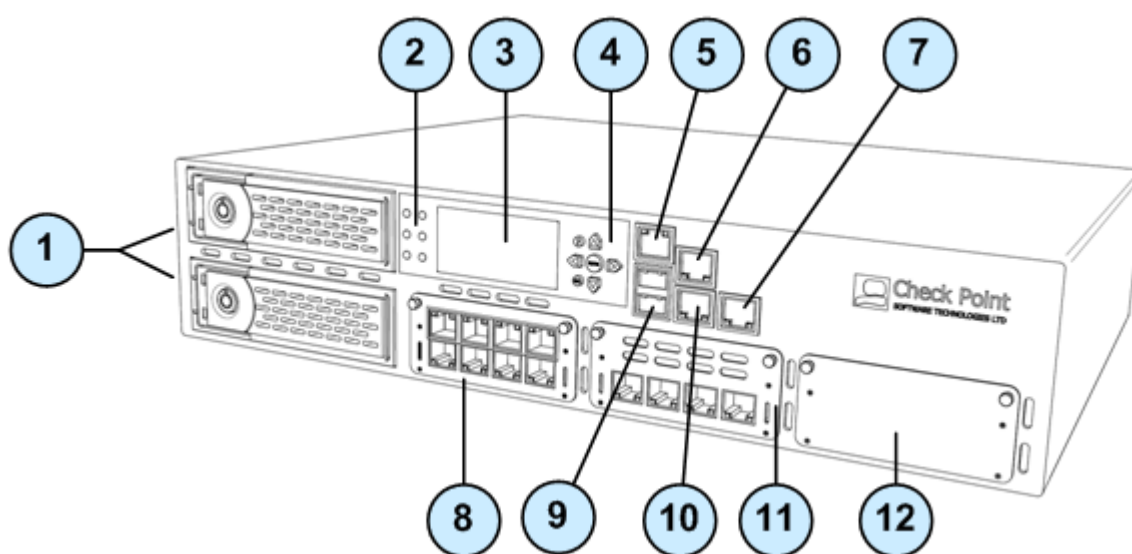| Item	Component	Description
1	2 Hard disk drives	When monitoring the disks using the `raid_diagnostic` command, `DiskID 0` is the top disk, and `DiskID 1` is the bottom disk
2	System LEDs	System power, system status, and hard disk activity
3	LCD screen	
4	Keypad	Perform basic management operations ("Using the LCD Panel" on page 28)
5	Console port	For a serial connection to the appliance using a terminal emulation program such as HyperTerminal
6	Management port	For an Ethernet connection to a remote management computer

Item	Component	Description
7	LOM port	LOM (Light Out Management) port for the optional LOM card
8	Expansion line card	8 Port 10/100/1000Base-T RJ-45. Model: CPAP-ACC-8-1C
9	USB ports	
10	Synchronization port	For synchronizing with cluster members or a high availability peer
11	Expansion line card	Expansion slot
12	Expansion line card	Expansion slot

Expansion Line Card Options

Expansion line cards can have two, four, or eight ports. These types of expansion line cards are available:

Model	Description
CPAC-2-10F	2 Port 10GBase-F SFP+ (without transceivers)
CPAC-4-1C	4 Port 10/100/1000Base-T RJ-45
CPAC-4-1F	4 Port 1000Base-F SFP (without transceivers)
CPAC-4-10F	4 Port 10GBase-F Ethernet PCI-e SFP+
CPAC-8-1C	8 Port 10/100/1000Base-T RJ-45

Check Point 12600 Front Panel

Item	Component	Description
1	2 Hard disk drives	When monitoring the disks using the `raid_diagnostic` command, `DiskID 0` is the top disk, and `DiskID 1` is the bottom disk
2	System LEDs	System power, system status, and hard disk activity

Item	Component	Description
3	LCD screen	
4	Keypad	Perform basic management operations ("Using the LCD Panel" on page 28)
5	Console port	For a serial connection to the appliance using a terminal emulation program such as HyperTerminal
6	Management port	For an Ethernet connection to a remote management computer
7	LOM port	LOM (Light Out Management) port for the optional LOM card
8	Expansion line card	8 Port 10/100/1000Base-T RJ-45. Model: CPAP-ACC-8-1C
9	USB ports	
10	Synchronization port	For synchronizing with cluster members or a high availability peer
11	Expansion line card	4 Port 10/100/1000Base-T RJ-45. Model: CPAP-ACC-4-1C
12	Expansion line card	Expansion slot

Expansion Line Card Options

Expansion line cards can have two, four, or eight ports. These types of expansion line cards are available:

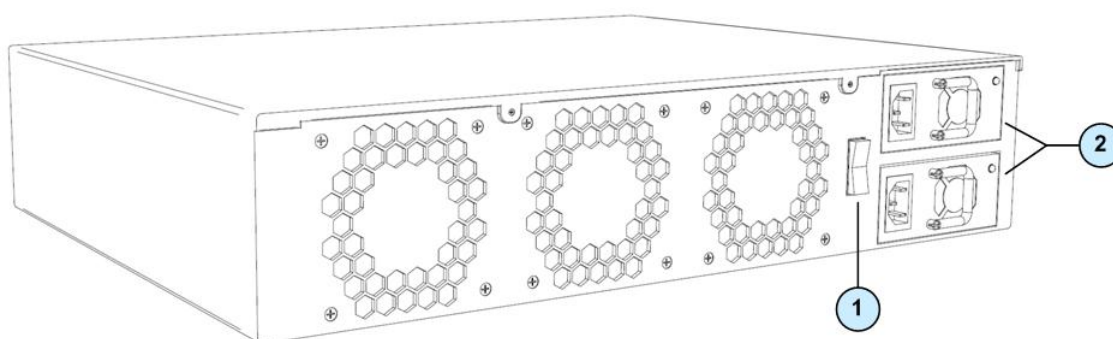| Model	Description
CPAC-2-10F	2 Port 10GBase-F SFP+ (without transceivers)
CPAC-4-1C	4 Port 10/100/1000Base-T RJ-45
CPAC-4-1F	4 Port 1000Base-F SFP (without transceivers)
CPAC-4-10F	4 Port 10GBase-F Ethernet PCI-e SFP+
CPAC-8-1C	8 Port 10/100/1000Base-T RJ-45

Rear Panel Components

This section describes the hardware on the rear panel of the appliance.

Check Point 12200 Rear Panel
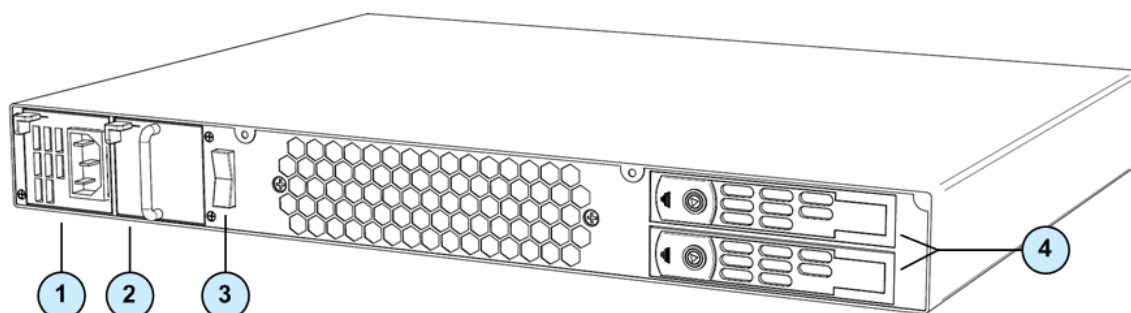
Item	Component	Description
1	Power supply unit	If a power supply fails or is not connected to the outlet, an alarm sounds continuously.
2	Power supply placeholder unit	For appliances that are provisioned with one power supply unit, the placeholder unit is used in the other power supply slot.
		If both power supply slots are not populated, a continuous alarm sounds.
3	Main power switch	
4	Hard disk drives	When monitoring the disks using the `raid_diagnostic` command, `DiskID 0` is the top disk, and `DiskID 1` is the bottom disk.

Check Point 12400 and 12600 Rear Panel

Item	Component	Description
1	Main power switch	
2	Power supply units	If a power supply fails or is not connected to the outlet, an alarm sounds continuously

Using the LCD Panel

The appliance has an LCD panel that can be used to perform basic management operations. You can select DHCP or configure the IP address, subnet netmask, and default gateway of the management interface. The appliance can also be rebooted.

Menu Options

Menu	Sub-menu	Purpose
Network		
	DHCP	Enable or disable DHCP for the management interface.
	Set Mgmt IP	Set the management interface IP address.
	Set Netmask	Set the management interface network mask.
	Set Default GW	Set the management interface default gateway.
System		
	Reboot	Reboot the appliance.

LCD Panel Keys

To	Press
Enter the main menu	(ENTER)
Navigate the menu	▲ or ▼
Change a number	◄ or ►
Select a menu option	(ENTER)
Go back to previous menu	(ESC)

When Entering an IP Address

To	Press
Enter the grub menu	(ENTER) or ►
Move to the next digit	►
Move back to the previous digit	◄
Approve the change	(ENTER) when the cursor is located on the last digit
Cancel the IP change	(ESC) when the cursor is located on the first digit

To	Press
Change current digit	▲ or ▼

Customer Replaceable Parts

To ensure maximum availability and ease of maintenance, the Check Point 12000 Appliances contain the following customer replaceable parts:

	12200	12400	12600
Power supply units	1 Power supply unit 1 Place holder unit	2	2
Expansion line card	1	1 (2 optional slots)	2 (1 optional slot)
Hard disk drives	1 (1 optional slot) Located at rear of appliance	1 (1 optional) Located at front of appliance	2 Located at front of appliance

Unless directed to do so by Check Point technical support, customers are prohibited by warranty and support agreements from replacing any parts. Customers are prohibited from opening the appliance case under any circumstances.

Replacing Power Supplies

Check Point 12000 Appliances have a redundant power supply. This section explains how to remove and install a power supply or placeholder unit.

📝 **Note** - If both power supply slots are not populated, a continuous alarm sounds.
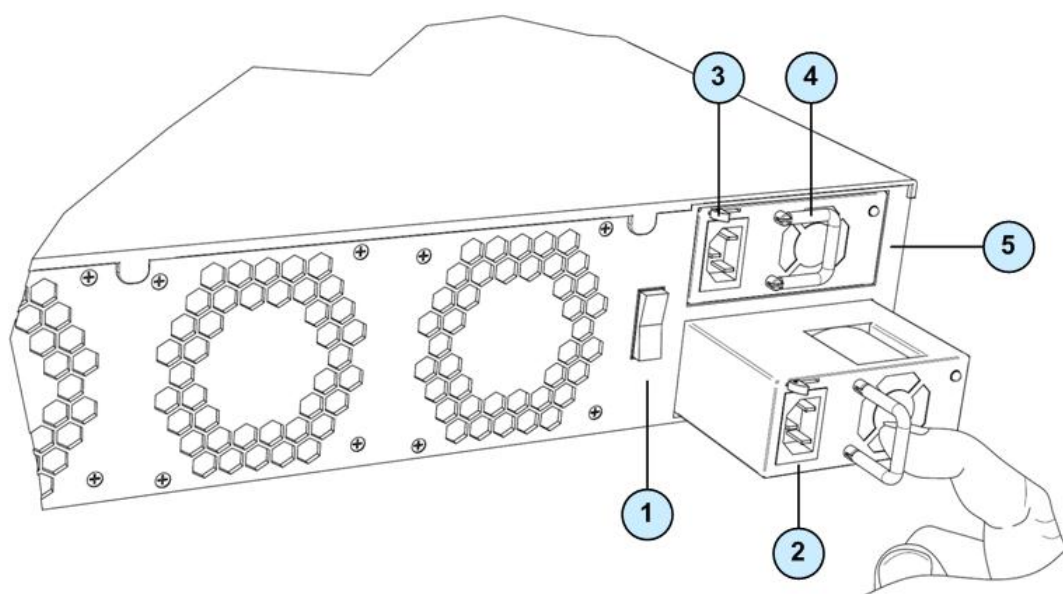
Item	Description
1	Power switch

Item	Description
2	Power cord socket
3	Release lever
4	Extraction handle
5	Power supply unit

Removing Power Supplies

This section describes how to remove a power supply or placeholder unit from the appliance.

To remove a power supply unit:

1. If the alarm sounds, press the red alarm button to the right of the power supply.
   The alarm stops.
2. Remove the power cord from the power supply unit.
3. Engage and hold the release lever on the power supply or placeholder unit.
4. Pull the extraction handle to remove the power supply or placeholder unit.
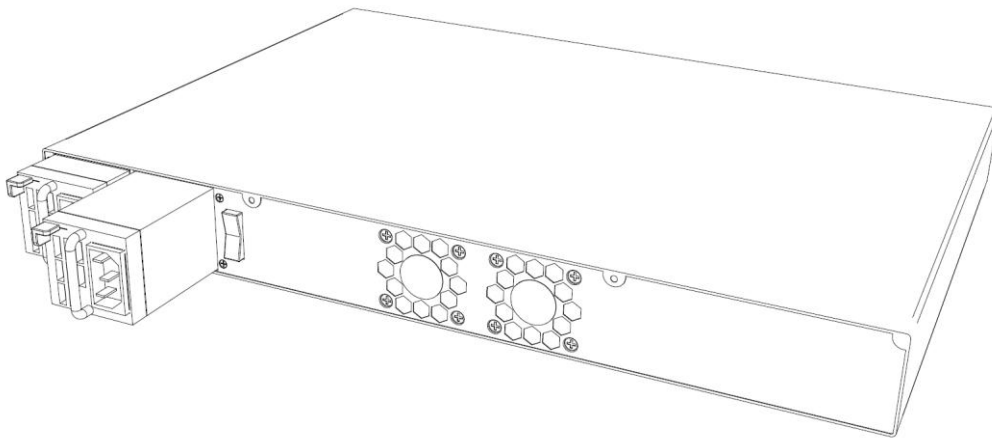
> **Note** - Remove the power supply unit with the extraction handle to prevent any possible damage.

Installing Power Supplies

This section describes how to install a power supply or placeholder unit into the appliance.

To install a replacement power supply:

1. Insert the power supply or placeholder unit into the power supply slot.
2. Push the power supply or placeholder unit until the release lever clicks.
3. Insert the power cord into the power supply socket. Make sure that the green LED is illuminated.
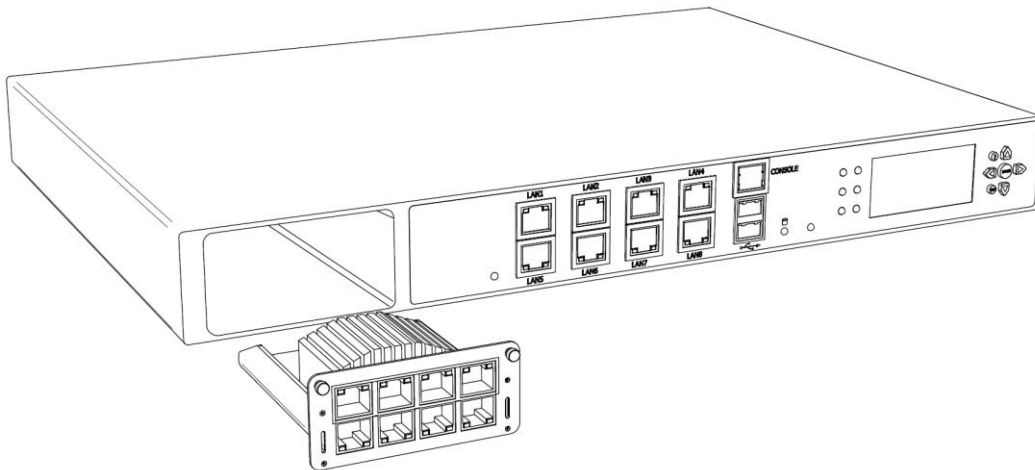
Replacing Expansion Line Cards

This section presents the procedures for removing and installing an expansion line card unit. There are two types of expansion cards that can be installed: Ethernet or Fiber Optic ports.

> ⚠ **Important** - Make certain that you are electromagnetically grounded when performing the following procedures. Static electricity can damage the appliance.

Check Point 12200 Appliance

The built-in Ethernet ports (ETH1 - ETH7) are not customer replaceable.

Check Point 12400 and 12600 Appliances
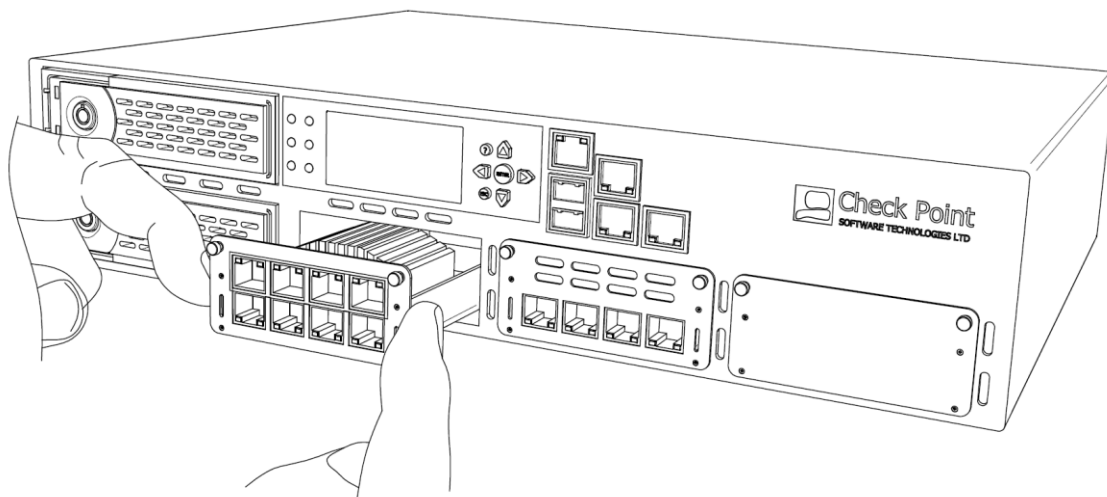
Removing Expansion Line Cards

To remove an expansion line card:

1. Power off the appliance and remove the power cords from the power supply units.
2. Loosen the retaining screws on the expansion line card.
3. Holding the screws, pull the expansion line card out of the expansion slot.
4. Place the metal cover over the expansion slot.
5. Tighten the screws on the metal cover.

Installing Expansion Line Cards

To install an expansion line card:

1. Power off the appliance and remove the power cords from the power supply units.
2. Loosen the retaining screws on the metal cover on the front of the appliance.
3. Holding the screws, remove the metal cover.
4. Insert the expansion line card into the expansion slot.
5. Push until the card clicks into place.
6. Tighten the retaining screws on the expansion line card.

Replacing Hard Disk Drives on Check Point 12200

This section describes how to remove or install a hard disk drive in a Check Point 12200 appliance.
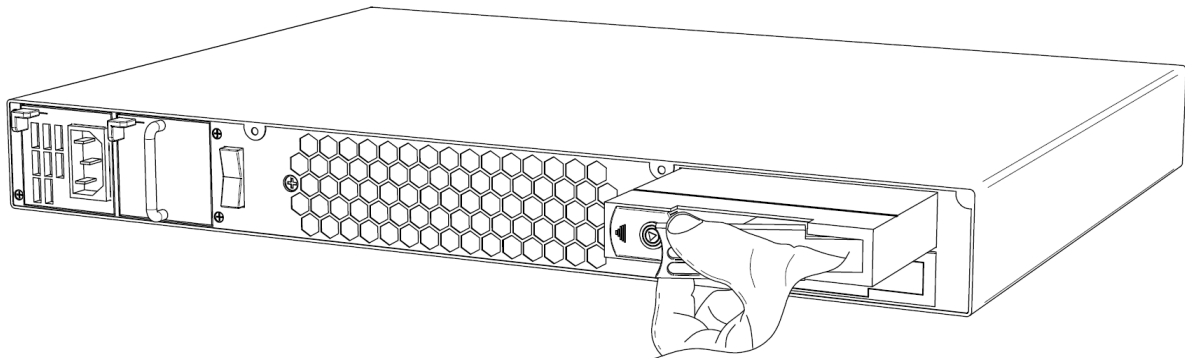
Removing a Hard Disk Drive

To remove a hard disk drive in a Check Point 12200:
1. Using the key supplied in the toolkit, unlock the drive.
2. Slide the release latch toward the left. The extraction handle pops out.
3. Using the extraction handle, remove the drive from the slot.

Installing a Hard Disk Drive

To install a hard disk drive in a Check Point 12200:
1. Slide the replacement hard disk drive into the slot.
2. Push the extraction handle until it closes and the drive clicks into place.
3. Using the key supplied in the toolkit, lock the new drive.

Replacing Hard Disk Drives on Check Point 12400 and 12600

This section describes how to remove or install a hard disk drive in a Check Point 12400 or 12600 appliance.

Removing a Hard Disk Drive

To remove a hard disk drive from a Check Point 12400 or 12600:

1. Using the key supplied in the toolkit, unlock the drive.
2. Slide the release latch toward the left. The extraction handle pops out.
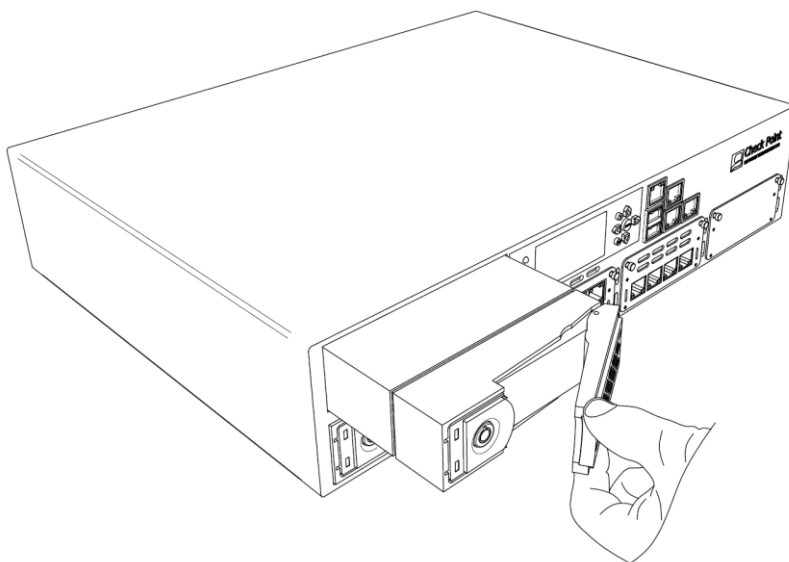3. Using the extraction handle, remove the drive from the slot.

Installing a Hard Disk Drive

To install a hard disk drive in a Check Point 12400 or 12600:

1. Slide the replacement hard disk drive into the slot.
2. Push the extraction handle until it closes and the drive clicks into place.
3. Using the key supplied in the toolkit, lock the new drive.

Chapter 5

Restoring Factory Defaults

Part of troubleshooting can be to restore the appliance to its factory default settings.

To restore your appliance, use one of these:

- WebUI
- Console boot menu
- LCD panel

⚠ **Important** - Restoring factory defaults deletes all information on the appliance.

In This Chapter

Restoring Using the WebUI

To restore the appliance to its default factory configuration using the WebUI:

1. In a Web browser, navigate to
   `https://<appliance_ip_address>:4434`
2. Log in to the WebUI of the appliance using your administrator username and password.
3. In the WebUI, click **Appliance** > **Image Management**.
   The Image Management window opens:
4. Select the relevant image version you wish to revert to.
5. Click **Revert**.

Restoring Using the Console Boot Menu

To restore the appliance to its default factory configuration using the console boot menu:

1. Connect the supplied DB9 serial cable to the console port on the front of the appliance.
2. Connect to the appliance using a terminal emulation program such as Microsoft HyperTerminal or PuTTY.
3. In the HyperTerminal **Connect To** window, select a port from the **Connect using** list. Define the port settings: 9600 BPS, 8 bits, no parity, 1 stop bit.
4. From the **Flow control** list, select **None**.
5. Click, **Call > Call** to connect to the appliance.
6. Switch on the appliance. The appliance begins the boot process and status messages appear in HyperTerminal.

7. During the boot process, text similar to that shown below appears:

```
IDE Channel 2 . Master Disk  : LBA,ATA 100,  164GB

PCI device listing ...
Bus No. Device No. Func No. Vendor/Device Class Device Class                IRQ
-------------------------------------------------------------------------------
    0       2        0      8086  2772  0300  Display Cntrlr               10
    0      29        0      8086  27C8  0C03  USB 1.0/1.1 UHCI Cntrlr      15
    0      29        1      8086  27C9  0C03  USB 1.0/1.1 UHCI Cntrlr      15
    0      29        2      8086  27CA  0C03  USB 1.0/1.1 UHCI Cntrlr       5
    0      29        3      8086  27CB  0C03  USB 1.0/1.1 UHCI Cntrlr      10
    0      31        1      8086  27DF  0101  IDE CntrlrCI Cntrlr          14
    0      31        2      8086  27C0  0101  IDE Cntrlr                   15
    0      31        3      8086  27DA  0C05  SMBus Cntrlr                 15
    1       0        0      8086  109A  0200  Network Cntrlr               10
    2       0        0      8086  109A  0200  Network Cntrlr               11
    3       0        0      8086  109A  0200  Network Cntrlr                5
    4       0        0      8086  109A  0200  Network Cntrlr               15
    5       0        0      8086  109A  0200  Network Cntrlr               10
    6       0        0      8086  109A  0200  Network Cntrlr               11
    7      12        0      8086  1076  0200  Network Cntrlr               10
    7      13        0      8086  1076  0200  Network Cntrlr               11
                                             ACPI Controller               9
Verifying DMI Pool Data ..........
Press any key to see the boot menu [Booting in 4 seconds] _
```

8. At this point, you have approximately four seconds to hit any key to activate the Boot menu.

9. The **Boot** menu opens. Scroll to the relevant **Reset to factory defaults** image and press **Enter**.

Restoring Using the LCD Panel

To restore the appliance to its default factory configuration using the LCD Panel keys:

1. Reboot or power on the appliance.

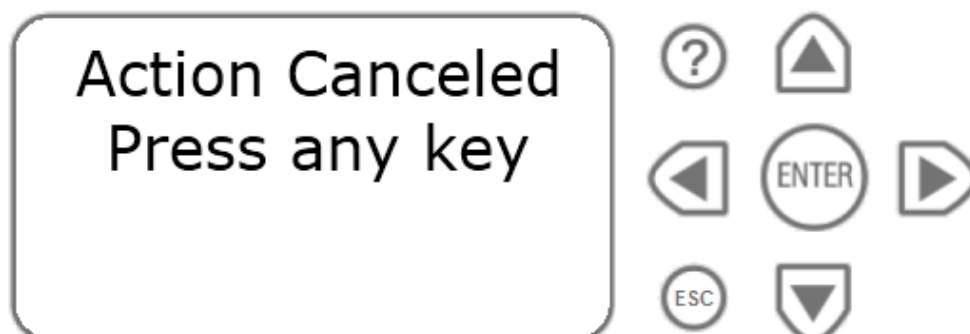2. When the countdown begins, press any of the arrow keys.

The **Boot** menu appears.

3. Using the arrow buttons, scroll to the relevant default factory image.

4. Press ⬆.

5. Confirm the reset by pressing ⬆.

Pressing any other button causes the Action Canceled message to display:

At this point, pressing any key returns you to the boot menu.

6. Once you have confirmed the reset, wait for the appliance to restore the factory image. While the appliance is restored to the default image, this message is continuously displayed: `Reverting image don't turn off`.

    After the appliance is restored to its default factory configuration, the appliance reboots and the initializing message appears.

Chapter 6

Registration and Support

Registration

The appliance requires a product-specific Check Point license. Get a license and register at the Check Point Appliance Registration site (http://register.checkpoint.com/cpapp).

Support

For additional technical information about Check Point products, consult the Check Point Support Center (http://supportcenter.checkpoint.com).

Where To From Here?

You have now learned the basics that you need to get started. The next step is to obtain more advanced knowledge of your Check Point software.

Check Point documentation is available on the Check Point Support Center (http://supportcenter.checkpoint.com).

Be sure to also use the Online Help when you are working with the Check Point SmartConsole clients.

Appendix A

Compliance Information

This appendix contains declaration of conformity, compliance, and related regulatory information.

Declaration of Conformity

Manufacturer's Name: Check Point Software Technologies Ltd.

Manufacturer's Address: 5 Ha'Solelim Street, Tel Aviv 67897, Israel

Declare that under our sole responsibility the products

Model Number: P-210, P-220, and P-230

Product Options: All

Date First Applied: July, 2011

Conforms to the following product specifications:

EMC	FCC, 47 CFR, Part 15, Class A	Information Technology Equipment - Radio Disturbance Characteristics
	VCCI V-3, Class A	Information Technology Equipment - Radio Disturbance Characteristics
	AS/NZS CISPR22, Class A	Information Technology Equipment - Radio Disturbance Characteristics
	ICES-003, Class A	Information Technology Equipment - Radio Disturbance Characteristics
	CISPR22	Information Technology Equipment - Radio Disturbance Characteristics
	EN55022, Class A	Information Technology Equipment - Radio Disturbance Characteristics
	EN 61000-3-2	Information Technology Equipment - Harmonics Characteristics
	EN61000-3-3	Information Technology Equipment - Flicker Characteristics
	EN 55024	Information Technology Equipment - Immunity Characteristics

	EN61000-4-2	Information Technology Equipment - Electrostatic Discharge Immunity
	EN61000-4-3	Information Technology Equipment - Radiated RF Immunity
	EN61000-4-4	Information Technology Equipment - Fast Transient Immunity
	EN61000-4-5	Information Technology Equipment - Surge Immunity
	EN61000-4-6	Information Technology Equipment - Conducted RF Immunity
	EN61000-4-11	Information Technology Equipment - Voltage Dips and Short Interruptions Immunity
Safety	CAN/CSA, C22.2 No. 60950-1-07	Safety of Information Technology Equipment
	UL 60950-1:2007 second edition	Safety of Information Technology Equipment
	EN 60950-1:2006/A11:2009	Safety of Information Technology Equipment

The product herewith complies with the requirements of the EU Directive 2006/95/EC and the EMC Directive 2004/108/EC

Date and Place of issue: July, 2011, Tel Aviv, Israel

FCC Notice (US)

This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense.

Caution

Any changes or modifications not expressly approved by the grantee of this device could void the user's authority to operate the equipment.